

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Original) A bicycle crank assembly comprising:
a crank shaft including first and second portions with the second portion being positioned on a right side of the first portion and having a larger diameter than the first portion; and
a right crank including a sprocket mounting part including a plurality of arm parts configured and arranged to support at least one sprocket, a crank arm part formed integrally with the sprocket mounting part and extending in a radial direction from a first surface of the sprocket mounting part, and a crank shaft engagement bore formed in a center of a second surface located on an opposite side of the sprocket mounting part as the first surface,
the right crank being crimp-fastened to the crank shaft by installing the second portion of the crank shaft into the engagement bore such that a gap is formed between the first portion and the engagement bore, and pressing the periphery of the engagement bore from the second surface toward the first surface in the axial direction of the crank shaft such that a pressed portion bulges radially inward and an annular space is formed between the crank shaft and the engagement bore.
2. (Original) The bicycle crank assembly as recited in claim 1, wherein the annular space defines an end face that is recessed from the second surface toward the first surface.
3. (Currently Amended) The bicycle crank assembly as recited in claim 1, further comprising
a seal member is disposed between a radially inward-facing surface of the annular space and a radially outward-facing surface of the first portion.

4. (Original) The bicycle crank assembly as recited in claim 1, wherein the engagement bore has an axial length that is shorter than the diameter of the second portion.

5. (Currently Amended) A bicycle crank assembly comprising:
a crank shaft including first and second portions with the second portion being positioned closely adjacent to the first portion and having a larger diameter than the first portion; and

a crank having a pedal mounting part provided on a tip end thereof and an engagement bore formed in a base end thereof, the engagement bore having the second portion received therein with the an axial length that is shorter than the diameter of the second portion, the engagement bore being base end having a deformed pressed portion that is crimp-fastened to the second portion of the crank shaft, the engagement bore having a maximum axial length that is shorter than a maximum diameter of the second portion of the crank shaft.

6. (Original) The bicycle crank assembly as recited in claim 5, wherein the crank is a right crank provided with a sprocket mounting part having a plurality of arms configured to support one or more sprockets, and a crank arm part formed integrally with the sprocket mounting part and extending in a radial direction from a first surface of the sprocket mounting part; and

the engagement bore is formed in a center of a second surface located on an opposite side of the sprocket mounting part as the first surface.

7. (Currently Amended) The bicycle crank assembly as recited in claim 5, wherein

the crank is crimp-fastened by installing the second portion of the crank shaft into the engagement bore such that a gap is formed between the first portion and the engagement bore, and pressing a periphery of the engagement bore outwardly in the axial direction of the crank shaft such that the deformed ~~that a~~ pressed portion bulges radially inward.

8. (Original) The bicycle crank assembly as recited in claim 5, wherein the crank shaft includes a hollow portion located where the right crank is mounted thereto, the crank shaft is configured and arranged to be supported in a freely rotatable manner at both axially-facing ends of a hanger by bearing assemblies installed in the hanger.

9. (Original) The bicycle crank assembly as recited in claim 8, wherein the hollow portion of the crank shaft extends an entire length of the crank shaft.

10. (Currently Amended) The bicycle crank assembly as recited in claim 5, wherein

a radially outward-facing surface of the second portion has a plurality of first undulations that are spaced in a circumferential direction of the crank shaft; and

the engagement bore has a plurality of second undulations that are spaced in a circumferential direction of the engagement bore, the first and second undulations being meshing ~~mesh~~ together in such a manner that the crank cannot rotate relative to the crank shaft.

11. (Original) The bicycle crank assembly as recited in claim 10, wherein the first undulations and second undulations each include positioning undulations in two different circumferential spaced locations.

12. (Currently Amended) The bicycle crank assembly as recited in claim 5, wherein

the second portion of the crank shaft has a first length in the axial direction; and the engagement bore has a second length that is longer than the first length and extends almost through the base end ~~to the first surface~~.

13. (Currently Amended) The bicycle crank assembly as recited in claim 12, wherein

the engagement bore is a blind bore ~~such that a hole for mounting the crank shaft is not provided in the first surface of the sprocket mounting part.~~

14. (Currently Amended) The bicycle crank assembly as recited in claim 5, wherein
the second portion of the crank shaft has a first length in the axial direction; and
the engagement bore has a second length that is longer than the first length and passes through the base end ~~first surface~~.

15. (Currently Amended) The bicycle crank assembly as recited in claim 14, wherein further comprising
the crank includes a lid member covering an open end of the engagement bore the
opening in the first surface.

16. (Currently Amended) The bicycle crank assembly as recited in claim 5, wherein
the deformed pressed portion of the crank includes ~~is formed by~~ first and second
alternating spaces ~~spacings~~ that alternate relative to one another in a circumferential direction
to form alternating pressed portions that have different axial lengths.

17. (Currently Amended) The bicycle crank assembly as recited in claim 6, wherein
a left crank is mounted in a non-rotatable manner to a left end of the first portion such
that it ~~its crank arm part~~ is rotationally 180 degrees out of phase with respect to the crank arm
part of the crank.

18. (New) The bicycle crank assembly as recited in claim 1, wherein
the engagement bore is a blind bore.

19. (New) A bicycle crank assembly comprising:
a crank shaft including first and second portions with the second portion being
positioned on a right side of the first portion and having a larger diameter than the first
portion; and

a right crank including a sprocket mounting part with a plurality of arm parts configured and arranged to support at least one sprocket, a crank arm part extending in a radial direction from the sprocket mounting part, the sprocket mounting part having a crank shaft engagement bore formed therein,

the second portion of the crank shaft being crimp-fastened in the engagement bore by a deformed pressing portion of the sprocket mounting part that bulges radially inward of the larger diameter of the second portion with an annular recess being disposed in the sprocket mounting part radially between the first portion and the engagement bore of the sprocket mounting part.

20. (New) The bicycle crank assembly as recited in claim 19, wherein the engagement bore is a blind bore.